

Remarks

The non-final Office Action dated July 23, 2008 listed the following objections and rejections: an objection to the abstract; an objection to the drawings; an objection to claims 9 and 13; and claims 1-2, 13-18, 20-21, 24 and 26 stand rejected under 35 U.S.C. § 103(a) over D'Arrigo *et al.* (U.S. Patent No. 6,218,820) in view of Vinciarelli *et al.* (U.S. Patent No. 5,432,431). The Office Action also indicated that claims 3-12, 19 and 22 would be allowable if rewritten in independent form. Applicant appreciates the indicated allowability of claims 3-12, 19 and 22; in response thereto, Applicant has rewritten claim 3 in independent form, including limitations of base claim 1. Thus, Applicant submits that claim 3, as well as claims 4-12 that depend from claim 3, are in condition for allowance based on the previous indication of allowability. Applicant respectfully traverses all of the rejections and, unless explicitly stated, Applicant does not acquiesce to any objection, rejection or averment made in the Office Action.

In response to the objection to the abstract, Applicant has provided an amended abstract as indicated on page 2 of this paper in which the word comprises has been removed as requested by the Examiner. Applicant notes that M.P.E.P. § 608.01(b) (cited by the Examiner) does not indicate that it is improper to use the word comprises in the abstract. As such, Applicant requests that the objection to the abstract be removed.

In response to the objection to the drawings, Applicant has attached three replacement drawing sheets to this paper as indicated on page 3 of this paper. Thus, Applicant requests that the objection to the drawings be removed.

In response to the objection to the claims 9 and 13, Applicant has amended claim 9 to remove the right parenthesis in line 4. Regarding claim 13, Applicant notes that there is no reference character 103 present in claim 13; however Applicant has amended claim 19 to remove a reference character 103. As such, Applicant requests that the objection to claims 9 and 13 be removed. Applicant notes that other minor amendments have been made to various claims to improve readability. For example, Applicant has added several commas to various claims. These amendments are not being made to overcome any of the rejections raised by the instant Office Action, which fail for at least the following reasons.

Applicant traverses each of the § 103(a) rejections because the rejections are not supported by the requisite correspondence from the asserted teachings of the references and because the Office Action fails to provide a valid reason for the proposed combination. As discussed in more detail below, instead of presenting a cogent case that a skilled artisan would be motivated by the prior art to implement the claimed invention, the § 103(a) rejections are based on insubstantial arguments that selected elements from the cited references could be assembled in a manner that is similar to much of the subject matter claimed by Applicant. This approach is contrary to the requirements of Section 103 and relevant law. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007) (“A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.”). This *KSR* decision cited with approval the basic § 103 tenet that, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *See In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) (as cited in *KSR*).

Applicant respectfully traverses the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 because the cited portions of the D'Arrigo reference do not correspond to the claimed invention which includes, for example, aspects directed to an integrator that integrates a difference between the further information and the difference signal to obtain a correction signal. The Office Action erroneously asserts that D'Arrigo's driving stage 10 and differential comparator 30 correspond to Applicant's integrator. *See, e.g.*, Figure 2. The cited portions of D'Arrigo do not teach that driving stage 10 and differential comparator 30 integrate a difference between the output of comparator 34 (*i.e.*, the Office Action's alleged further information) and the output of amplifier 28 (*i.e.*, the Office Action's alleged difference signal) to obtain the output of driving stage 10 (*i.e.*, the Office Action's alleged correction signal). Rather, D'Arrigo teaches that differential comparator 30 acts as a pulse width modulator that supplies an output voltage having a square waveform, the duty cycle of which is a function of the voltage supplied by amplifier 28 and the frequency of which depends on the frequency of the signal supplied by oscillator 32. *See, e.g.*, Col. 1:65 to Col. 2:4. D'Arrigo further teaches that driving stage 10 controls the opening and closing of switches 6 and 8 based partly on the output

of compactor 34. *See, e.g.*, Col. 2:5-30. Thus, the cited portions of D'Arrigo do not teach that driving stage 10 and differential comparator 30, either alone or in combination, integrate any signal. Accordingly, the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 because the cited portions of the D'Arrigo reference do not correspond to aspects of the claimed invention directed to determining a difference between a zero load voltage and the output voltage to obtain a difference signal. The Office Action erroneously asserts that D'Arrigo's amplifier 28 determines the difference between reference voltage VREF and the output voltage VOUT. *See, e.g.*, Figure 2. Instead, the cited portions of D'Arrigo teach that amplifier 28 determines the difference between VREF and a division voltage VFB, which is proportional through a division ratio to VOUT. *See, e.g.*, Col. 2:43-55. Thus, the output of amplifier 28 (*i.e.*, the Office Action's alleged difference signal) does not represent the difference between VREF 28 (*i.e.*, the Office Action's alleged zero load voltage) and VOUT 28 (*i.e.*, the Office Action's alleged output voltage). Moreover, the cited portions of D'Arrigo do not teach that VREF 28 (*i.e.*, the Office Action's alleged zero load voltage) is a zero load voltage. *See, e.g.*, Col. 2:49-64. Accordingly, the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 because the Office Action fails to cite to any reference that teaches or suggests aspects of the claimed invention directed to a switch controller for receiving the difference signal, the momentary information and the correction signal to control the switch for obtaining a substantially zero correction signal in a steady state. The Office Action acknowledges that the D'Arrigo reference does not teach such a switch controller; the Office Action then simply asserts that the Vinciarelli reference teaches a switch controller that turns "the switch on and off at times when the current in the switch is sustainably zero". *See, e.g.*, page 4:16-21 of the instant Office Action. The Office Action, however, fails to even assert (and the cited portions of Vinciarelli do not teach) that Vinciarelli's switch controller receives a difference signal, a momentary information and a correction signal, or that Vinciarelli's switch controller controls a switch for

obtaining a substantially zero correction signal in a steady state. *See, e.g.*, Col. 3:3-5. Thus, the Office Action fails to cite to any reference that teaches or suggests Applicant's switch controller. As such, Applicant submits that any combination that includes such aspects would appear to be based on improper and insufficient hindsight reconstruction (*i.e.*, the Office Action has simply identified elements and appears to be arranging these elements in the manner taught by Applicant's disclosure). *See, e.g.*, M.P.E.P. § 2142. Accordingly, the § 103(a) rejection of claims 1-2, 13-18, 20-21, 24 and 26 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claim 13 because the cited portions of the D'Arrigo reference do not correspond to aspects of the claimed invention directed to the first and second impedances being the same common resistor. The cited portions of D'Arrigo do not teach that resistor 42 (*i.e.*, the Office Action's alleged first impedance) and resistor 14 (*i.e.*, the Office Action's alleged second impedance) are the same common resistor. Instead, D'Arrigo teaches that resistors 14 and 42 are separate distinct resistive elements. *See, e.g.*, Figure 2. Accordingly, the § 103(a) rejection of claim 13 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 17 and 20 because the cited portions of the D'Arrigo reference do not correspond to aspects of the claimed invention directed to a series arrangement of a first switch and a further switch. The cited portions of D'Arrigo do not teach that switch 8 (*i.e.*, the Office Action's alleged first switch) and switch 6 (*i.e.*, the Office Action's alleged further switch) are arranged in a series. Instead, D'Arrigo teaches that switches 6 and 8 are arranged in parallel with each other. *See, e.g.*, Figure 2. Accordingly, the § 103(a) rejection of claims 17 and 20 is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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Attachments: Three replacement drawing sheets.